

CIACA Forecast Group

Investment up; trades shortage seen

The large number of major projects that have been announced for Alberta in the past 12 months has given rise to speculation that Alberta may face serious shortages of skilled trades people over the next few years. With these projects in mind, a forecast of construction investment has been prepared by the CIACA forecast group. Using this investment scenario, an estimate of construction manpower requirements has been developed and an analysis of potential trade shortages has been undertaken.

Alberta's Investment Outlook

The two major assumptions underlying this construction investment forecast is that there will be a significant increase in large resource project activity as well as a continuation of relatively stable oil prices. A partial list of major resource projects includes:

- the OSLO oil sands project;
- the Husky upgrader;
- the Shell-Caroline gas project;
- the Alberta Newsprint mill at Whitecourt;

- the Alberta Energy Company pulp mill at Slave lake;
- the Alberta Pacific pulp mill at Athabasca;
- the Diashowa pulp mill at Peace River;
- the Procter and Gamble pulp mill expansion at Grande Prairie;
- Nova's pipeline expansion; and
- the Genesee Phase II power plant. The total construction value of all major resource projects to 1996 is approximately \$16 billion.

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Subcommittees key to CIACA success

The council last met in December to wrap up a busy year of working on the new labour legislation.

Subcommittees have been the backbone of CIACA since it was first established, and at the October meeting the council gave renewed emphasis and direction to them.

The **Manpower and Training Committee** is chaired by Len Pelland and Newt Yeomens; Guy Priddle, Neil Chanon, Peter Pittman and Bob Fowler are members.

They have reviewed and reported to the minister on the Apprenticeship and Industry Training Review, recommending that the government accept the report of the Advisory Panel on the Review Committee.

The Manpower and Training Committee is currently monitoring the manpower and training needs that may develop in the short and long term.

The **Health and Safety Committee** is chaired by Bernie Smyth and Harold Taylor; John Thompson, Dave Follett and Gerry Virtue are members. This committee has been reviewing industry statistics, and health and safety issues and practices.

The **Editorial Board** of the CIACA Bulletin continues to do excellent work in managing the forecasting activities and the bulletin. Co Vanderlaan chairs the board; Neil Tidsbury and Jim Aitcheson are the other council appointees.

The other members of the editorial board, Merv Ellis, Mike Halpen, Janet Howell and Bob Nicoll, are drawn from the forecasters' group.

The **Construction Forecast Group** established by CIACA includes public and private sector forecasters who are directly connected with future activities in Alberta's construction industry.

The group meets three times a year to share information on related issue, trends, methods and forecasts. They work together to produce forecasts for publication in the *CIACA Bulletin*. Co Vanderlaan participates in the group as a liaison person with CIACA.

The **Liaison Committee on Education and Communication** was set up by the council to work with Alberta Labour personnel on education and communication matters. Committee chairman Wil VandenBorn works with Neil

Tidsbury and Jim Aitcheson.

We are very well served by these people, who devote a great deal of their time to the business of grappling with problems and developing solutions for the construction industry.

Phil Walker P. Eng.

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Skilled labour shortage as construction investment climbs

Total construction investment for Alberta, expressed in 1989 dollars, shows that investment will increase from \$11.2 billion in 1988 to \$15.2 billion by 1993, an average annual increase of 6.3 per cent. Figure 1 shows both the total level of construction investment and its major components. Oil and gas investment is expected to increase at an average of 11 per cent over the forecast period; residential construction investment by 3.6 per cent and non-residential building by 6.1 per cent.

Alberta's Construction Labour Market

Figure 2 shows both the historical and forecast levels of construction industry employment and unemployment for Alberta for the period 1981 to 1993. Since peaking in 1981, construction employment levels declined from a high of 123,000 to a low of 67,000 in 1986,

and then showed a recovery to 75,000 by 1988. Based on the investment forecast, construction industry employment is expected to increase from 81,000 in 1989 to 101,000 by 1993, an annual increase of seven per cent. During the same period, the availability of construction labour is estimated to increase by only 4.3 per cent. This supply increase is based on apprenticeship registrations, deaths and retirements, and estimates of interprovincial migration.

From Figure 2, it can be seen that the average level of unemployment in the construction industry reached a maximum of 29,000 in 1983 and has been declining since then. In 1988, the average level of unemployment was 13,000; this level is expected to continue to decline throughout the forecast period. By 1990, it is estimated that unemployment will drop to 6,000. This compares to an unemployment level of 8,000

in 1981 when Alberta was still undergoing an investment boom. As the future supply of construction workers is not expected to grow as fast as the demand for workers, the level of unemployment declines.

Estimating the supply of labour is extremely difficult and subject to many assumptions, including, for example, the relative levels of economic activity in Alberta and Ontario. This analysis is based on a forecast of limited movement of construction workers from outside the province. In the late 1970s, it was estimated that more than 50 per cent of new construction workers came from outside the province. Should provincial migration of that magnitude occur again, the construction supply estimates would be considerably higher and any forecasted shortage considerably lower.

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Figure 1

Construction Investment by Type Actual and Forecast, Alberta, 1981 to 1993

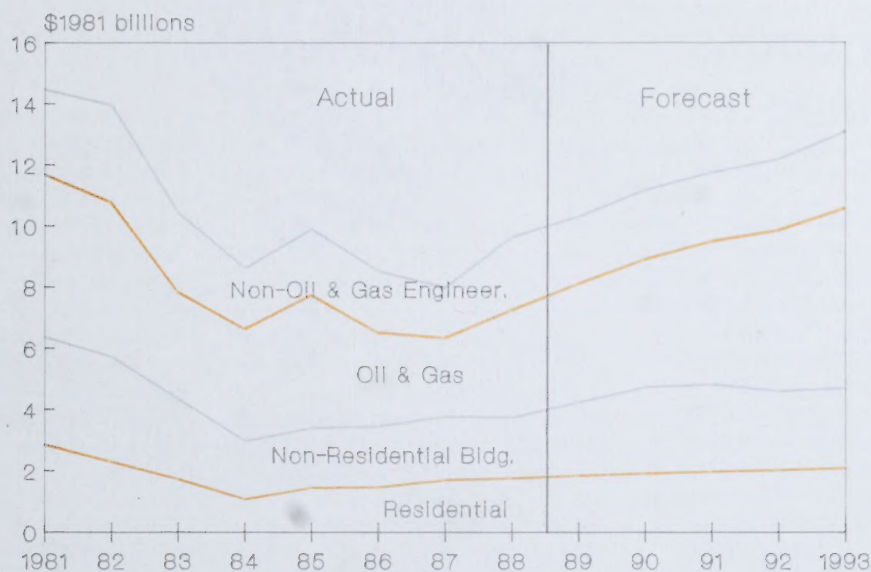
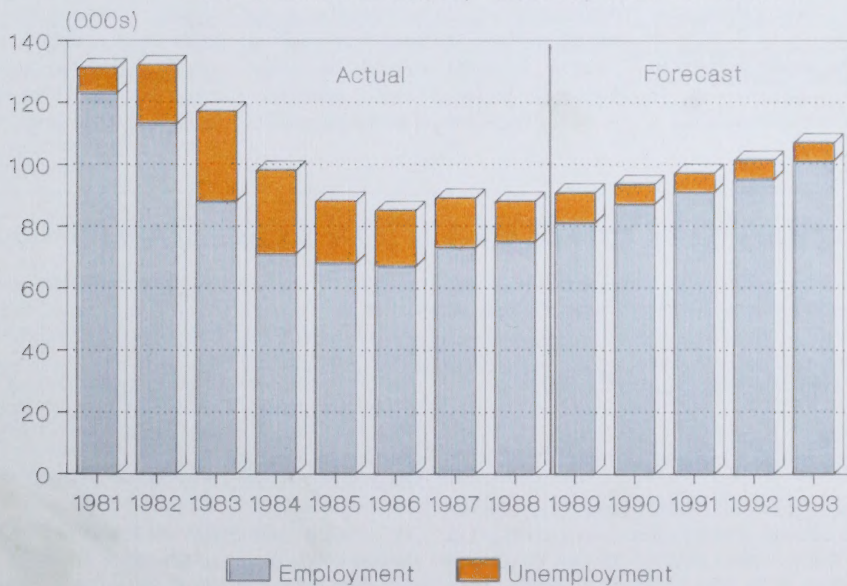


Figure 2 Construction Industry Employment and Unemployment
Actual and Forecast, Alberta, 1981 to 1993



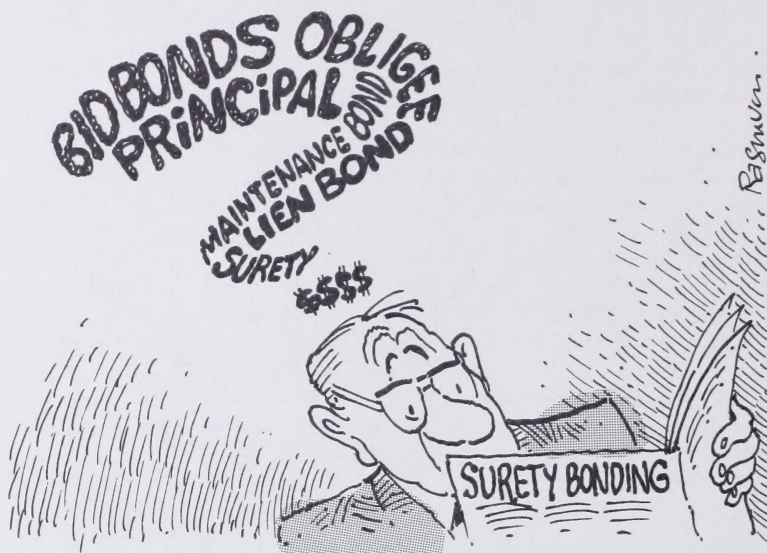
Construction surety bonds explained

Surety bonding is one of the most misunderstood parts of the construction industry. Many people consider bonding to be a form of insurance. Although bonds are generally purchased through an insurance agent acting as a broker for a surety company, there are some important differences.

Insurance is a form of pre-financing against risk in the event of an unwanted or unexpected occurrence in the future, while bonding is an extension of credit. A bonded person has arranged credit with a surety company that can be used to complete an obligation for that person if he or she becomes unable to do so at some time in the future. This extension of credit is technically closer to bank credit than to insurance.

There are three parties to a surety bond:

- the **principal**, the person required to post a bond;
- the **obligee**, the person requesting a bond; and



- the **surety**, the person or company providing the bond.

In construction, an owner (the obligee) who has retained a contractor (the principal) to build a project may, as part of the agreement between them, require the contractor to provide a financial guarantee that the contract will be fulfilled. This guarantee may be in the form of a bank letter of credit, a certified cheque or a surety bond. Other guarantees may be available, but these three are most common. In North America, the surety bond is the preferred form of guarantee.

When a bond is the guarantee,

the contractor and a surety company enter into a contract naming the owner as a recipient of benefit. This is an unusual situation; two parties are entering into a tripartite agreement.

The issuance of a surety bond tells the owner that the surety has examined the contractor and believes the contractor (whether individual or corporation), to be financially and technically capable of meeting the obligation in the construction contract, as detailed in the specifications. The bond also tells the owner that should the surety have misjudged the contractor, the surety will

See surety bonds page 5

ACCESS TO CONSTRUCTION FORECASTS

The following agencies offer construction forecast service subscriptions. For rates and details, contact the agencies directly.

Canadata

1450 Don Mills Road, Don Mills, Ontario M3B 2X7
(416) 445-6641

The Dalcro Group

1100, 10080 Jasper Avenue Edmonton, Alberta T5J 1V9

Informetrica

P.O. Box 828, Station B, Ottawa, Ontario K1P 5P9 (613) 238-4831

Current holdings of forecast publications which include Alberta construction forecasts, available for loan or reference

from the Alberta Labour Information Services Branch, include the following:

- Alberta Construction Association, Annual Forecast (the 1989 forecast is now available);
- Bank of Nova Scotia, Global Economic Outlook (annual);
- Conference Board of Canada, Quarterly Provincial Forecast;
- Electrical Utility Planning Council, Alberta Energy and Demand Forecast (annual); and
- Royal Bank of Canada, Econoscope (monthly).

To contact the Library Services Branch, use the RITE line (toll-free) or in Edmonton call 427-8533.

Surety bonds

complete the contractual obligations.

In other words, a surety bond is not a form of insurance; it is a contract between a principal and a financial underwriter.

Construction contracts are the most common form of bonded contracts. All longstanding construction companies will have "bond accounts" to allow them to procure bonds before submitting tenders for which bonds are required.

To qualify for a bond account, a contractor undergoes rigorous scrutiny by the surety company. This is similar to obtaining a bank loan or line of credit. Once a bond account is approved, the contractor is provided with a single-job limit (the maximum dollar value of a single project the surety believes the contractor is capable of handling) and an overall limit on the total amount of uncompleted work which may be on hand at one time (beyond which no further bonding will be granted).

Most sureties apply these limits as guidelines only and may increase or decrease them at any time as circumstances change.

The most common forms of construction bonds are bid bonds, consents of surety, performance bonds, labour and material payment bonds, release of holdback bonds, lien bonds and

maintenance bonds.

Bid bonds are usually for 10 per cent of the tender price. The bid bond is attached to a tender at the time of submission to the owner or his agent. It is evidence of good faith and indicates that the contractor is capable of obtaining the specified contract bonds if the contract is awarded.

Consent of surety is relatively new to the surety industry and is generally misunderstood by both contractors and owners. An owner may require, at the time of tender, a "consent" that a surety will provide final bonding. This can be in addition to a bid bond or a separate instrument.

A consent of surety is strictly a two-party agreement between contractor and surety and provides that if the contractor enters into a contract with the owner the surety will provide the specified final contract bonds regardless of the circumstances.

A **performance bond**, usually for 50 per cent of the contract price, is a relatively simple legal document that provides for the surety to complete the contract if the contractor defaults.

A performance bond only completes work remaining and does not provide payment for unpaid creditors of work remaining before the default.

A **labour and materials performance bond** may be for 50 to 100 per cent of the contract price.

Certain creditors of a defaulting contractor (subcontractors, for example) will be paid under a labour and materials payment bond.

A **release of holdback bond** is a contract between the surety and contractor to protect the owner against breach of holdback provisions. This instrument speeds up cash flow to contractors by allowing the owner to release contractual holdback money before the date it is due to be released.

A **lien bond** is a release-of-holdback bond issued to the court to allow a lien to be lifted and the flow of progress payments to continue unimpeded. The bond is a guarantee to the court that funds are available to satisfy any rightful claims should the court rule in favour of the plaintiff.

A **maintenance bond** is available (although extremely difficult to obtain) to extend the guarantee of a performance bond beyond the standard one-year period.

Barry Peters, bonding consultant to the Alberta Construction Association, prepared this summary and may be contacted through the ACA at 455-1122.

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Construction skill shortages seen for the 1990s

One other factor that cannot be calculated is the movement of tradespersons from other industries to the construction industry. Based on a Statistics Canada survey of journeymen and apprentices, an estimated 40 per cent of all construction tradespeople actually work in the construction industry. The remaining 60 per cent work in other industries such as services (maintenance and repair) or manufacturing. If wages in the construction industry were to rise, relative to these other industries, then some of these skilled workers would be likely

to seek jobs in construction. This movement would, to a certain degree, alleviate shortages in the construction sector but would cause problems elsewhere.

Construction Skill Shortages

Assuming that there was not a major infiltration into the construction industry, possible shortages during the 1990s may occur in:

- insulating occupations;
- roofing, waterproofing and related trades;
- concrete finishing;

- electricians;
- pipefitting, plumbing;
- excavating, grading and paving;
- structural metal erectors; and
- carpentry and related trades.

Changes in major project investment levels or in world oil prices would have a great impact on the type and level of potential shortages. Monitoring continues on both these developments and their impact on Alberta's construction labour market.

Workers' Health and Safety -- What's Working?

The safety and health of workers is of concern to everyone. The costs in family disruption, personal pain, lost time and health care are enormous. By working collectively we can bring about positive change.

That is why the Conference Society of Alberta has chosen as its theme for 1989 *Workplace Health and Safety -- What's Working?*

The theme will be dealt with in three mini-conferences, in Edmonton May 24, Calgary May 25 and in Grande Prairie September 8. These sessions will lead into the main conference in Jasper October 12, 13 and 14.

The objectives of the conference, as outlined by the Conference Society of Alberta, are to:

- provide information on health and safety to build an awareness of what is, and to develop the direction for what ought to be;
- provide ideas for realistic approaches to health and safety programs;
- help delegates consider a diversity of approaches to health and safety programs; and to
- foster an attitude of co-operation.

The Conference Society of Alberta is a non-profit organization representing business, labour and government. It was started in 1973 when informed discussion among leaders from these sectors led to an agreement of joint sponsorship. At that time, a decision was made to emphasize the leadership role of

business and labour while government undertook an advisory and facilitating role. That original emphasis remains the cornerstone of the society's organization and operations.

In 1983, the society established a permanent secretariat to support its activities, which have evolved to include an annual conference and regional seminars to help further the interests of the participants.

The society believes that it will take the will of both employers and employees to make a difference in the creation of a safer and healthier workplace.

For information about the mini-conferences or the Jasper conference, contact the society at 421-9330.

Health and Safety Round Table

The Occupational Health and Safety Council recently sponsored an Occupational Health and Safety Round Table at the Banff Centre School of Management. The round table brought together decision makers from the public and private sector to discuss long-term strategies for occupational safety.

Ralph Shepherd, chief executive officer of Syncrude Canada provided an outline of the "safety first" approach taken at Syncrude. Other reports were heard from the Upstream Petroleum Industry Task Force on Safety, and the Alberta Chamber of Resources Accident Prevention Task Force.

Vern Millard, chairman of the board of directors of the Workers' Compensation Board, provided an outline of current activities.

The high costs of poor safety practices and the complexity of factors

influencing potential responses were evident to all participants. Among the issues identified as having a major impact on possible program design were:

- the nature and level of technology;
- legal issues;
- the perceptions, expectations and attitudes of participants; and
- the need for better knowledge and understanding at both the individual and organizational levels.

It became clear that a higher level of co-ordination and acceptance of joint responsibility were required if effective solutions are to be developed.

The round table helped create a framework for further action. A series of regional workshops will be held to address specific issues and in October 1989 the Occupational Health and Safety Council and the Conference Society will co-operate in holding a follow-up conference.

The *CIACA Construction Bulletin* is published three times a year by the Construction Industry Advisory Council of Alberta. It is intended to inform the construction industry about the activities of the council, and to disseminate economic forecast information pertinent to the Alberta construction industry.

The *Bulletin* is directed by an editorial board chaired by Co J. Vanderlaan.

The editorial board is made up of the following, representing:

Labour	Jim Aitcheson
	Co J. Vanderlaan
Management	Merv Ellis
	Neil Tidsbury

Owners
Government

Mike Halpen
Janet E. Howell
R.G. (Bob) Nicoll

The editor is Maryhelen Vicars.

Distribution is through members of the Construction Industry Advisory Council of Alberta. Comments, requests for copies or other correspondence should be directed to council members or to Alberta Labour, 10th Floor, 10808 99 Ave., Edmonton, Alberta T5K 0G2, 427-7494.

The chairman of the Construction Industry Advisory Council of Alberta is Phil Walker, P.Eng.

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